JAMES C. BURKE PAPERS

Volume 4

John Justin Johnson, Bladen County, N.C. Farmer

James C. Burke

Cover: John Justin Johnson and Roy Elkins lubricating a combine grain head on January 1, 2000

James C. Burke Papers

Volume 4

(John Justin Johnson, Bladen County Farmer)

JOHN JUSTIN JOHNSON, BLADEN COUNTY FARMER

John Justin Johnson, "J. J." to his friends, is the son of Mrs. Almira Johnson. He is 47 years old and the owner of Johnson Farms. Mr. Johnson represents the new generation of farmer: college educated and have returned to agriculture out of a desire to carry on the family tradition. His grandfather, James Douglas Johnson, great uncle, Marvin Daniel, and his cousin Alonza Ross Johnson once owned most of the land he presently farms. Now the land is owned by their descendants and rented by Mr. Johnson. James Douglas Johnson was the grandson of the same Jacob Johnson (1824-1899). The father of Jacob Johnson, Joel Johnson, also farmed the area around Brown's Creek. Wilton Johnson, John Johnson's father, died when he was 5 years old, so there has been a one-generation skip in that tradition.

Mr. Johnson has entered farming gradually while remaining a respected member of the faculty at Tar Heel High School. Over the years, he has acquired the necessary equipment and has studied modern agricultural techniques. In addition, he also enjoys a wealth of practical knowledge that he has been able to learn from his interactions with other local farmers. The acreage he farms increases yearly, and the crops have become more diverse. He has constructed a new barn with a well-equipped machine shop that can accommodate a combine. John employs part-time mechanics when necessary, and usually an assistant throughout the year. Two older farmers, McAuly Gooden and Clyde Johnson, are his mentors. Frequently offering their knowledge and assistance, these two men are always willing to set aside their own interests to aid John as well as other neighbors in a rough situation. In addition, John's friends in the neighborhood, both farmers and non-farmers, stop by to lend a hand throughout the year.

Nearly all the acreage Mr. Johnson plants is rented from local landowners by the season. When he began farming fields five additional fields in the fall of 1998, he planted a crop of winter wheat to build up the soil. These fields had previously been planted with cotton, and cotton has a tendency to strip nitrogen from the soil. Cotton had been planted in these fields year after year without rotation. The soil had been continuously drenched with nutrients to compensate for what had been taken out of the soil by each year's crop. Mr. Johnson, however, was employing a two-year rotation cycle: winter wheat followed by soybeans, then followed by corn. The wheat harvest was accomplished without incident, though wheat prices at the time were low when this crop was taken to market. But Mr. Johnson did not expect to make much of a profit on this crop: its main benefit would be to enrich the soil. When soybeans were planted in the spring of 1999, they were beautiful and hardy. However, when harvest time was approaching, Hurricane Floyd struck on September 15th and left the fields submerged under several feet of water. A period of six weeks of drying was required before a harvest was possible. What follows is a narrative of the events that transpired during that harvest.

After the storm

Mechanical problems are one of the facts of life that the farmer has to deal with regularly. Machinery and dirt do not mix. No piece of machinery, no matter how well designed or how new, can be expected to work perfectly in the dirtiest environment imaginable. A combine is a particularly complex machine. Belts, pulleys, chains, gears, and a host of other moving parts make it one of the few human contrivances with the built-in potential for frequent mechanical breakdown. Still, one can only marvel at the beauty of seeing one of these machines at work. It is like music and it thrills the heart of any true lover of machines. Today's farmer must be able to address mechanical problems on site. In many cases, broken parts can be refurbished without a significant loss of time. Much time between the planting and harvest is spent maintaining equipment. Few outside the profession realize this aspect of the farmer's routine.

After the soybeans were planted in the spring of 1999, they grew beautiful and hardy. However, when harvest time was approaching, hurricane Floyd struck on September 15th and left the fields submerged under several feet of water. A period of six weeks of drying was required before a harvest was possible.

John Johnson encountered a number of problems with his combine during the 1999 soybean harvest. Hurricane debris was partially to blame in at least two instances. One field, shaded by pecan trees on three sides, was the first to present problems. These trees contributed a number of broken limbs to an assortment of organic and synthetic items that littered the field. Roy, a young man working for Mr. Johnson, had spent a better part of the day gathering up debris from this field in preparation for harvesting. John and Roy walked the field prior to bringing in the combine. When both were satisfied that the field had been cleared of any objects that might damage the combine, John proceeded to harvest it. Beginning at the northern edge of the field, he followed its boundaries with the combine. On the third pass the combine picked up a branch that had previously gone undetected. The branch was drawn up into the combine and damaged the shaker trays in the rear. At this point, no further harvesting could be accomplished without replacing the damaged tray. The combine was driven back to the shop. After several hours of work the shaker tray had been removed and the branch that had caused the damage had been dislodged from a difficult position to the rear of the trays. This branch was stubbornly wedged and as a result the whole rear tray assembly had to be dismantled. The December sun had set by the time this project was completed.

That afternoon, a neighbor joined Roy and John in the machine shop at this point. The broken shaker tray had been previously damaged and the welded joints had broken apart when the branch became lodged between the upper and lower trays. The branch had caused such severe damage to the upper tray that it simply was not worth fixing. About 9:00 PM that evening, John decided it would be best to send everybody home and begin again the next morning. He planned to travel to White Lake early the next morning to retrieve a replacement tray from a combine stored there that John had purchased for spare parts. The crew would begin afresh the next morning.

The next morning the John traveled to a farm outside White Lake, approximately eight miles outside Elizabethtown, and removed both shaker trays from the broken combine. About 10:00 AM that morning the combine was ready to resume harvesting. Roy scoured the field looking for branches as before. Finding no more offensive branches, they proceeded to harvest successfully 5 acres of soybeans before noon. When the combine's hoppers were at capacity, Roy brought up the grain truck, swung the auger over the rear of the truck, and began to discharge his load from the hoppers.

Midway into the task the wooden wheel that maintains pressure on the chain driving the lower auger broke and ceased to function. Once more a mechanical problem that could not have been anticipated brought the harvest to a standstill. At first the men attempted to use bailing wire to hold the split pressure wheel together. This did not work very well, and soon the wooden wheel broke beyond the point where it could be repaired. At that point the neighbor that had joined them the afternoon before drove up. After he and John discussed this new development, they decided to apply pressure to the drive chain of the lower auger with an ax handle. This did not work, and they decided to return to the machine shop. The winter sun had started to set. Roy drove the grain truck with a load of soybeans that had already been gathered to the barn, with John following with the combine. The neighbor followed him with the equipment truck. With all the equipment safely at the machine shop, the men considered the next course of action. An industrial strength space heater resembling a detached jet engine was turned on inside the machine shop. They pondered the latest mechanical problem while consuming the first meal of the day, two-piece boxes of fried chicken and canned sodas, sitting on bar stools around the roaring heater. Roy was dismissed for the day with instructions to meet at the barn once again at 7 o'clock the next morning. Joe examined the fragments of the shattered wooden pressure wheel. He recommended that for the time being they make a substitute wheel. Ordering a replacement through the parts shop in Lumberton might take a few days. Two days had already been lost to mechanical problems. The solution, though, was found behind the barn. Several tall oak trees had been knocked over by Hurricane Floyd. Finding a branch about the same diameter as the wheel was not difficult. The two men cut off a length of oak branch and took it inside the shop for finishing. About ten segments of the branch were cut and drilled through the center. The most promising of these were fitted with washers and soaked in oil, and one was fitted to the combine's chain guide. The others were placed into an empty fried chicken box as backup and put into the equipment truck with the tools. After starting the combine, John engaged the auger to test their handiwork. The repair had been effective. The neighbor backed the grain truck out of the barn, and in a short time the combine's hoppers were empty. The combine was ready for the next day's work.

The next morning Roy and John began to harvest the soybeans. No problems were encountered this day. From time to time, as the grain trucks reached their capacity, they transported their load to Bladenboro. Although that was a short drive, there was always a line of other trucks unloading their soybeans because of the late harvest. The result was it could take two hours. Also complicating the wait were the shortened operating hours at the grain market because of the Christmas season. Nothing further could be done at this point.

The grain trucks were filled to capacity. They decided to postpone harvesting more soybeans until he could unload the trucks the week after Christmas.

The week following Christmas would prove to be one of unending irritation. After a few passes with the combine, the engine began to overheat; the bearing in the fan assembly had frozen. The whole fan assembly had been torn from its mount and driven into the radiator. This was particularly discouraging since only a few months ago the radiator had been replaced at a cost of about $600.00. After allowing the engine to cool, John drove the combine back to the machine shop where he received a realistic assessment of the situation.

Mr. Johnson drove over to his McAuly Gooden's farm where he too was harvesting soybeans. He arrived to see this McAuly's combine broken down in the field, also. His crew was tightening the belts. John explained his predicament and expressed his desire to enlist the aid of his crew to help with the soybean harvest while he dealt with the mechanical problems. McAuly agreed to assist him, and Clyde Johnson also agreed to help. As mentioned earlier, these men had been John's mentors from the time he first expressed a desire to farm. Now, when he was in a terrible bind, both were willing to set their own work aside to help him. With two combines working and the grain trucks of both farms to take they yield to Bladenboro, John had a chance to make up for lost time.

The repair of the damaged radiator would prove to be three days' labor. Its repair would require the removal of about 200 bolts around the radiator assembly. John would have to remove the radiator and attempt to repair the damage rather than order a new radiator. Once again, there simply was not enough time to wait for replacement parts. Carefully, he removed the damaged fins from the radiator with a pair of needle-nose pliers. He trimmed the ends of the fins with metal shears and soldered them closed. He filled the radiator time and time again with water to detect any leaks. After a full day's work, he was satisfied that most of the leaks had been sealed. The next morning he would take the radiator into Elizabethtown to have it tested under pressure at the local radiator shop. As it turned out, for the most part, his repairs were successful. The radiator shop repaired the few leaks that revealed themselves under pressure, and it was ready to be installed a few hours later. Meanwhile the older farmers had started harvesting John's fields that morning. They periodically had to stop to do maintenance on their machines. One was having trouble with a shaker tray and had to remove debris from the trays manually with a pitchfork. The other had to stop and repair the cutter teeth on his grain head. By sundown they were working on a field that had not been harvested earlier. The spotlights on their John Deere combines cast beams of light down the rows as the darkness and chill overtook the operation.

After encountering a mangled branch still hanging from one of the ancient pecan trees that surround the field, the older farmers decided to call it a night. The next day would be New Year's Eve. By then they hoped to have three combines in the field if John could get his machine up and running by that time. As both crews were preparing to go home, John arrived and informed all present that he expected his machine to be operational by morning.

At the machine shop, John's combine had already been fitted with a repaired radiator. Left was the reassembly of the remaining mechanism with its 200 bolts, its pulleys and belts, and hoses and clamps. The cold evening made the whole greasy task a miserable affair. By 9:00 PM most of the work had been completed. What remained was to install two battery-powered electric fans to substitute for the belt-driven fan that had been ripped from its mount. As of yet no one was sure how to go about it, and it was questionable whether the fans would really help cool the radiator at all. Still, it wouldn't hurt to try. That problem would be addressed the next morning when the crew met at sunrise. Mr. Johnson closed up shop and retired to the main house for supper.

The next morning, New Year's Eve 1999, the so-called Y2K bug (a programing oversight that threatened to set computer clocks back to 1900 on January 1, 2000) was the last thing on anybody's mind. The technology that concerned Johnson's crew was not computerized. They joked that if the whole civilized world were thrown into the Dark Ages there would still be truckloads of soybeans to nourish the men and their families for years to come. However, not a one of them had ever cooked up a pot of soybeans. Given that tomorrow, the beginning of the year 2000, most likely wouldn't be any different from the day before, no one would try to satisfy his curiosity. About 9:00 AM, three combines were at work in the fields. Surprisingly, the work proceeded without any major mechanical problems. Mr. Johnson's electric fans, along with the cool weather, proved to be more than adequate in keeping his engine cool. By the afternoon, a large field of soybeans was complete, and the grain truck brimmed (see Figures 1-15).

By the first week of January 2000, the 1999 soybean harvest had been completed. Mr. Johnson managed to make a modest profit. However, hurricane Floyd had delayed the harvest by about six weeks. The soybean pods, which had already begun to dry before the hurricane, had to undergo drying a second time. The late-fall and early-winter cold, dry air was not ideal for this process. By the time harvesting had begun, the bean pods were almost open. The slightest vibration would send the beans to the ground. Though a great volume of soybeans was harvested, far too many pods, overripe, released their beans onto the ground. Had the harvest proceeded earlier as planned, the yield would have been greater.

The corn crop of 2000

By late January Mr. Johnson and Roy had begun disking the fields in preparation for planting corn in spring. By early February, most of the disking of the fields had been completed. Mr. Johnson, with the help of Mr. Gooden, arranged to transport the combine that had been purchased for spare parts from the farm outside White Lake to a wooded area to the rear of Mr. Gooden's machine shop. This would require a flatbed trailer sturdy enough to sustain the enormous weight of the machine. That trailer would also be needed to transport a tractor to maneuver the combine onto the flat bed. This combine had not been used for about five years. It could not be started.

Figure 1. John Justin Johnson

Figure 2. James C. Burke, a graduate student at the University of North Carolina at Wilmington, documented John Justin Johnson's farming career over several years, beginning after Hurricane Floyd in 1999.

Figure 3. Before breakfast on December 31, 1999, John Justin Johnson checked the repairs on the combine he made the previous evening.

Figure 4. This Massey Ferguson 300 combine underwent extensive emergency repairs during the last week of December, 1999.

Figure 5. The combine was fitted with a grain head for harvesting soybeans. As a consequence of flooded fields from Hurricane Floyd, Mr. Johnson could not attempt to harvest his soybeans until December.

Figure 6. Almira Johnson, John's mother, takes a look at the combine after it is made ready for harvesting soybeans.

Figure 7. John and his assistant Roy Elkins arrived in the fields to resume harvesting soybeans on January 1, 2000. McAuly Gooden and Clyde Johnson, two other Bladen County farmers, joined them with two more combines.

Figure 8. While John was making repairs to combine, the older farmers helped John by harvesting some of his fields.

Figure 9. This photograph shows two Massey Ferguson combines and one John Deere combine in the process of harvesting John's soybeans.

Figure 10. John Johnson and Roy Elkins lubricate the chain on the grain head.

Figure 11. Dwight Highsmith unloads soybeans from the combine hopper into the grain truck.

Figure 12. The rain truck is early full.

Figure 13. By early afternoon on January 1, 2000, the John's soybeans in this field had been harvested, and the grain truck was filled to its capacity.

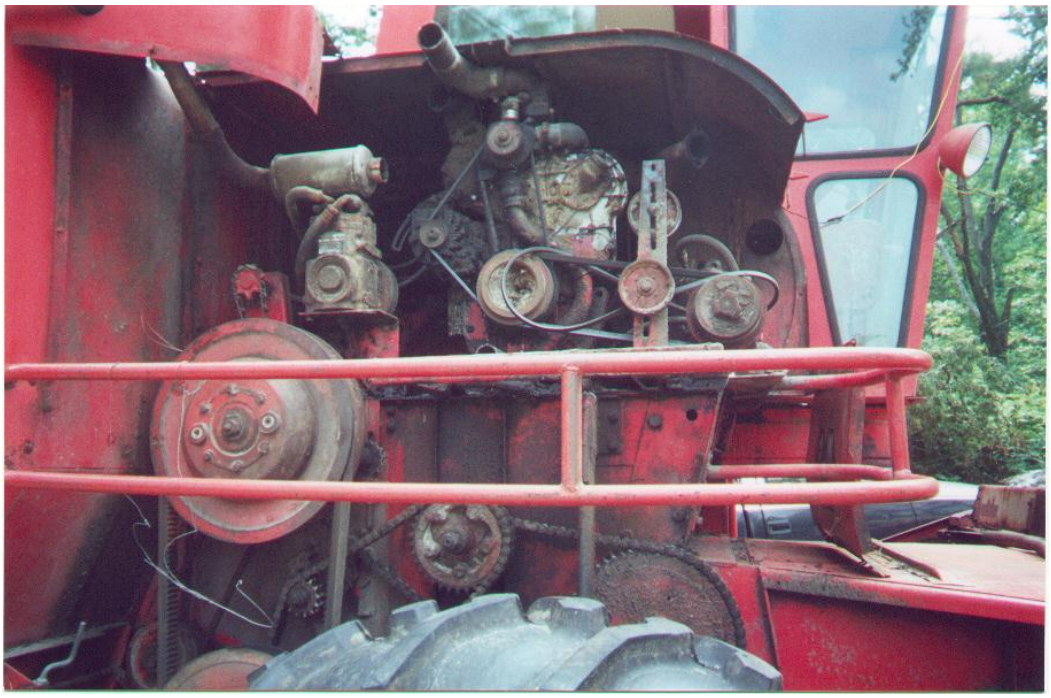

Figure 14. In the spring, Mr. Johnson replaced the patched up radiator that was damaged during the December harvest with salvaged radiator.

Figure 15. This photograph shows the two radiators side by side.

This project commenced during the first weekend of February when the weather had become bitterly cold. The combine was successfully transported to Mr. Gooden's property on that Friday and unloaded from the trailer the next morning. That Saturday morning the temperature had dropped to freezing. Mr. Johnson and Roy returned to the farm outside White Lake to bring back the tractor and two corn heads that had been part of the deal. This was a difficult task because it required the use of blocks mounted to nearby trees and several large coils of aircraft cable. The tractor would provide the pull to bring these two corn heads out of the wooded area where they had been left to rust, and they would then be hoisted on to the flatbed. As completion neared, Roy observed that a few snowflakes had started to fall. Quickly they loaded the second corn head onto the flat bed and secured it with heavy-duty chain. Likewise, the tractor was secured to the second flatbed trailer. Mr. Gooden and Roy took the tractor back to his machine shop, and Mr. Johnson followed them shortly thereafter in his pickup truck pulling the flatbed with the corn heads. By the time they reached Mr. Gooden's shop a light snow was falling. They decided to end work for that day and bring the corn heads to Mr. Johnson's machine shop sometime during the coming week.

Mr. Johnson retired to Woody's Grill, a favorite local eating establishment outside of Elizabethtown, for a plate of their wonderful barbecue. By the time he returned home the snow was coming down heavily. The evening's snow was gone by the next day. However, it was a prelude to a heavy snow that began early Tuesday morning. Snowstorms in southeastern North Carolina are rare events: often years pass between them. February of the year 2000 would bring two snowstorms, both happening on Tuesdays a week apart. Since Mr. Johnson did not have to teach on either of these days, he chose to endure the weather to get a head start on the fields. Perhaps, this was a wise move. His mother, Mrs. Almira Purdue Johnson, would have to undergo open-heart surgery in the last week of February. It was a tricky operation, and her recovery would take many weeks. Family matters took priority over the fields and, rightfully so, during this period.

In considering modern farming technique, one must understand that technology has replaced labor-intensive methods that have been prevalent throughout most of agricultural history. Herbicides have replaced tilling, synthetic fertilizers have greatly expanded the potential yield of the land on which crops are planted, and irrigation has compensated for the uncertainty of consistent rainfall in certain areas. Crops that have previously not been planted in certain regions of the country because of inadequate soil conditions now, through modern technique, produce yields competitive with those regions where the same crop can be grown without employing extensive soil preparation. Likewise, modern machinery has replaced animal traction and human handling throughout the cultivating and harvesting processes. The advantages of modern technique cannot be denied. If, in fact, we are to consider agriculture at this point in human history to be as time-dependent as any production process that generates raw material for further processing, genetic and chemical manipulation prove to be the most practical instruments by which the modern farmer can meet the demands of a marketplace that requires a uniform raw material in abundant quantities. Petroleum-fueled machines used throughout the process replace time-consuming, labor intensive, and ultimately more expensive human/animal traction.

On the other hand, there are a number of disadvantages in modern farming. Such disadvantages of modern technique start with fertilization. By applying fertilizers to a field, that field is no longer equal in potential to the surrounding land in its natural state. The field becomes an unnaturally rich growth medium for numerous forms of vegetation. An undesirable plant, which might exist in moderate population outside the field, will grow within the field to a degree disproportionate to its natural state. The soil of the field, both in surface structure and nutrients, has been prepared to maximize growth potential. That growth potential is not necessarily specific to the crops the farmer intends to plant; rather it is a general preparation inclusive of plants with a common need for certain soil nutrients. The growth potential of a field that has been treated with fertilizer and properly disked is exponentially greater that of a field supporting the same crop a century ago. The population weeds thrive alongside the crops. Machines operating in the fields will spread the seeds of undesirable plants throughout a field and between different fields. The farmer's solution to this problem is to apply agricultural herbicides to the fields.

The sciences of agricultural herbicides made significant advances during the last quarter-century. The suppression of weeds in the past had been done mechanically. A tool physically destroyed the weed. To a degree this method of weed control continues with the tractor-drawn cultivator. However, genetically altered crops have allowed herbicides to be the primary instrument used in the suppression of weeds. Seeds are bred to be resistant to certain herbicides. The herbicides and seeds are often developed as a single unit, often made by the same corporation. An example of this can be seen with *Roundup Ultra* and *Roundup* ready corn and soybeans. Monsanto has developed both the herbicide and the seed. Finally, the desired crop must be compatible with the machines that will harvest it. The machine and the plant must be compatible. A plant that leaves most of its product on the ground rather than holding it together long enough to be harvested is of little value. Likewise, a plant that is too tough and does not yield its product readily is apt to damage the machine. Modern technique involves the matching of soil, seed, chemicals, and machines. As a whole system, rather than a discrete series of interrelated parts, a crop today is an industrial process. The plant processes mineral nutrients into organic form, the plant being a molecular reorganization of the raw material deliberately placed in the soil.

During the spring of 2000, Mr. Johnson planted six fields with corn. These were the same fields that he had planted soybeans in 1999. He also planted soybeans, but in several field that he had recently rented. They will be referred to here as Field 1 through Field 5. There are two seconds of Field 4 located a distance apart, so they are distinguished as Field 4a and Field 4b. When Mr. Johnson was free to return to the fields in late March, he had determined that the yield from the soybean harvest on Field 3 and Field 4b had been lower than expected. On Fields 1 through 3 he applied 600 pounds of 5-10-30 fertilizer per acre (see Figure 16). On these two fields he applied 2 tons of lime per acre (see Figure 17). Prior to planting, he would apply the herbicide Atrazine 4L at ½ gallons per acre in Fields 1 through 4a. Field 1 was planted on April 22, Fields 2 through 4a were planted on April 24, Field 4b was planted on May 10, and Field 5 was planted on May 17. In Fields 4b and 5 he would apply the herbicide Bicep II, Magnum at three pints per acre (see Table 1). The corn seed he chose to plant was Pioneer 3167. The seeds were planted in rows that were set 36 inches apart (see Figure 18).

Figure 16. 5-10-30, a fertilizer is recommended for some Bladen County soils.

Figure 17. Lime sheds behind the McDougald's Warehouse 2 at Clarkton, NC.

Field Number	*Date Planted*	*Chemicals Applied*
1	3/18/00	ATRAZINE 4L / EVIK
2	3/22/00	ATRAZINE 4L / EVIK
3	3/29/00	ATRAZINE 4L / EVIK
4a	5/8/00	ATRAZINE 4L / EVIK
4b	5/8/00	BICEP II / EVIK
5	5/15/00	BICEP II

Table 1. Dates planted and chemicals applied one week after planting.

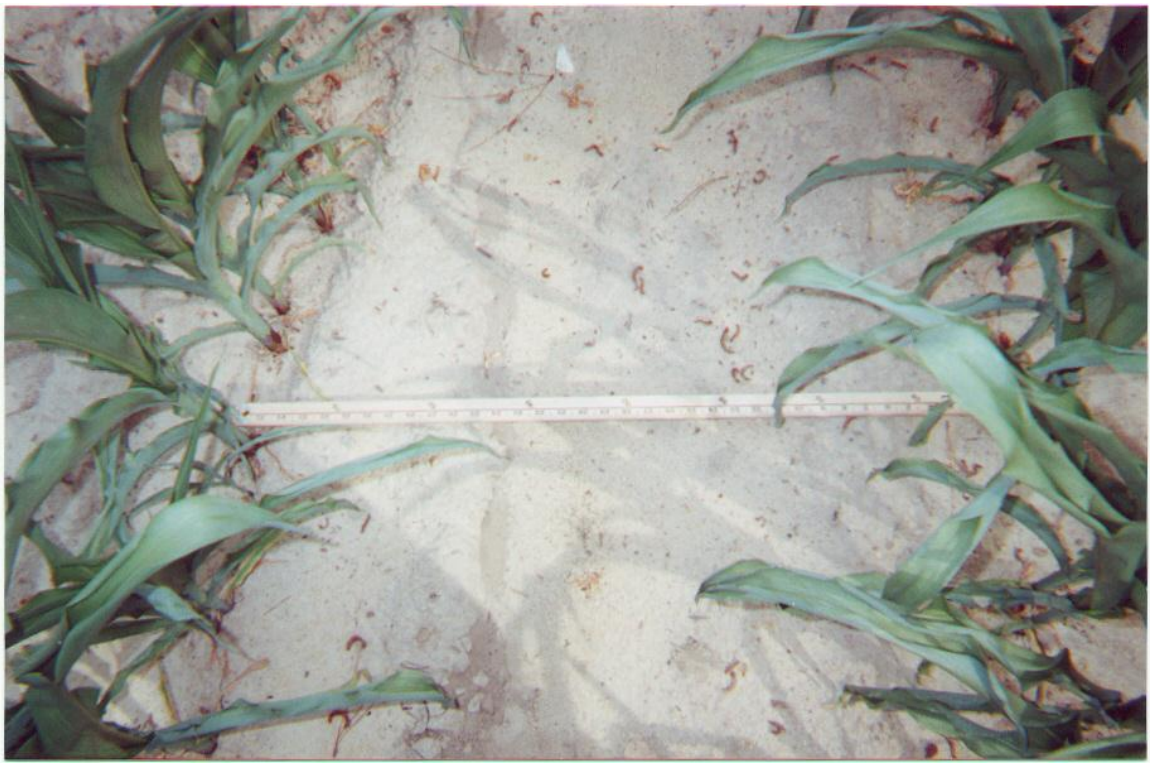

Figure 18. Rows are planted 36 inches apart.

Mr. Johnson, like many local farmers, purchases their seeds and chemicals from McDougald's Warehouse in Clarkton. This company has been in business for generations and it conveniently located next to the railroad tracks that pass through Clarkton.

The large spread in planting dates, the combined result of Mrs. Johnson's heart operation and unfavorable weather, provided an opportunity to study the growth rates and subsequent yields in these fields. The method used involved taking multiple measurements of the stalk height from the base of the stalks to the spread of the top leaves throughout each field (see Figure 19). An average plant was used as a representative of the whole field (see Table 2). The plant was photographed and the length recorded. Wide-angle photographs were taken of each field at the same time. The dates of planting and the agricultural chemicals applied covered several weeks (see Table 3). Field 5, the last field planted, overtakes all but Field 1 and stands even with Field 2 by the 10th week. Ear production on the stalk in this field appears to be the best of all the fields. However, in Field 5, there appears to be some weed growth worth noting as early as the 8th week. Sickle pod, which made its appearance before the corn had developed a canopy to block the sunlight, had kept up with the corn (see Table 3 and Figure 20). There were also ragweed plants in this field to a lesser degree. Field 3 had some infestation of Johnson grass. In both cases, these plants presented more of a problem to the combine than they did to the corn plants. These weeds tend to create clogs that require a cleaning out of the corn head and augers.

By the 12th week, it was obvious that Field 1 would not be producing the yield that was expected earlier. A complete survey of this field revealed that there were places in the field where extensive erosion had occurred. The corn plants in these areas were far smaller than average. Plant roots were partially exposed in these areas. During the next rain, this field was observed closely. The rainfall, indeed, was moving the soil. Much of this soil was being moved to the edges of the field into small mounds. At these positions, corn and weed growth was disproportionate to the average for the field as a whole.

Harvest was begun on October 7 and ended on October 30. The total yield was 47,300 pounds of corn. The total space that had been used for the experimental corn crop was 32 acres. Field 1 had the worst yield at 223.9 bushels. The best performance was seen in Field 5 (see Table 4).

Mr. Johnson determined that future corn crops on Fields 1 through 4b would receive 600 LBS/acre of nitrogen fertilizer and that the herbicide *Evik* would be used 2 to 3 weeks after the planting to eliminate the persistent sickle pod and Johnson grass. The rows in Field 1 would be banked against the flow of rainwater at its edges to prevent erosion. Field 4a had an area that produced tall stalks with small ears. After further examination, Johnson discovered that this spot – called the "hump" – was situated under a light water table. This field would be planted with soybeans in the spring of 2001. The winter crop for these entire fields would be wheat. By November of 2000, these fields had been disked and the soybean harvest of the main fields of Johnson Farms was in progress.

Figure 19. Making measurements in Field 5

Date	*Field 1*	*Field 2*	*Field 3*	*Field 4a*	*Field 4b*	*Field 5*
5/28/00	36”	21”	27”	12”	10”	2”
6/4/00	50”	36”	38”	24”	22”	9”
6/11/00	56”	46”	54”	34”	28”	14”
6/18/00	78”	56”	62”	45”	38”	23”
6/25/00	84”	68”	67”	47”	47”	33”
7/2/00	93”	71”	75”	63”	52”	54”
7/9/00	101”	80”	78”	66”	57”	68”
7/16/00	101”	90”	79”	85”	71”	79”
7/23/00	101”	92”	81”	86”	78”	81”
7/30/00	101”	92”	81”	86”	78”	92”

Table 2. Corn growth from May 28, 2000 to July 30, 2000

Weeds	*Diseases*	*Pests*
Sickle Pod	Corn Smut	Corn Bore
Johnson Grass	Fusarium	European Corn Bore
Crabgrass	Gibberella	Chinch Bug
Carpet Weed	Diplodia	Corn Ear Worm
Cockle Bur	Nigrospora	Southern Corn Root Worm
Morning Glory	Southern Leaf Blight	Corn Root Aphid
Mustards		Rodents
Velvet Leaf		Deer
Witch Weed		

Table 3. Weeds, diseases, and p that damage corn

Figure 20. Sickle Pod growing in Field 5

Field	*Acreage*	*Load*	*Bushels*
Field 1	7	12,540 LBS	223.90
Field 2 & Field 4a	10	15,260 LBS	254.33
Field 3 & Field 4b	7	12,040 LBS	215.00
Field 5	3	7460 LBS	133.21

Table 5. Data on the yields from Field 1 through Field 5 after harvest

Frying fish

On Sunday afternoon, October 8, 2000, Mr. Johnson invited his crew over to the barn for a fish fry. He had acquired a "mess" of spots for the occasion. Spots, a small croaker, are a favorite delicacy of coastal North Carolina locals. Its meat is flavorful and the texture is delicate. However, there is not much meat on this fish, so it takes a number of them to make a meal. This never is a problem, unless you run out of spots to fry. A meal of spots would not be complete without hushpuppies, coleslaw, and sweet iced tea.

One fellow had brought along a propane burner mounted on a tripod that served as a cooker. He lit the burner and placed the deep fry pot on the fire. This pot was equipped with a wire mesh strainer. Mr. Johnson prepared the fish and fixings on the tailgate of a pickup truck. The breading for the fish was a simple mixture of cornmeal, salt, and pepper. The fish, cleaned and gutted, are placed in the dry cornmeal mixture and turned once to get a light cornmeal coating that provides just enough of a breading. Hushpuppies are a mixture of self-rising cornmeal, salt, pepper, and a little water. Onions are optional. It is said that hushpuppies are the remains of what was left in the mixing bowl when cornbread was made, and it was fried into little pieces and thrown to the dogs to keep them quiet. When Katie, John's dog, showed up to hover around to beg for scraps from the meal, she served as proof of this assertion. There were plenty of hushpuppies for her. The fish bones, however, will end up in a container that Mr. Johnson will put in his pickup, as Katie shouldn't have them.

Soon another gentleman from the neighborhood rides up in his old truck. With a convivial chuckle he jokingly chides John about not having the food ready by the time he arrived. "Well, we were waiting on you," John replies, "We were thinking you got lost." John begins to fry the first batch of spots. The friend replies, "Lost? I could smell that fish from the house even before you started cooking it!" John shakes his head as his crew acts as if he didn't hear that remark. He continued by mentioning that last year about this time everybody's fields were a sea of muck. McAuly's corn was blown down, and John's soybeans fields were filled with debris. The man tending the burner had experienced flood damage to his home. The string of hurricanes over the last few years had made farming in this region a test of nerves. After Bertha, Fran, Bonnie, and Floyd, the farmers expected to be hit again. It would be a question of how much damage the next one would do. The season was predicted to be an active one for the year 2000. There were hurricanes in the Atlantic Ocean, but nothing had come ashore in the Carolinas. Though October was still considered dangerous, with the corn harvest underway, everyone was optimistic that this year North Carolina farmers were in the clear. The older farmer remarked that he had the best peanut crop in years. The cotton crop throughout the county looked the best it had in years. Many farmers had already started harvesting corn in September. Now Mr. Johnson and his crew were nearly done with the corn harvest. It was time to celebrate the forbearance of nature.

That day, they were engaging in a tradition that had been in existence thousands of years, the harvest feast. Albeit a small affair, it was a celebration of thanksgiving more substantial than the yearly ritual most call Thanksgiving, the difference being that these men have toiled and fretted up to their day of thanksgiving. There were no hurricanes to destroy the crops and no mechanical breakdowns to hinder the harvest. Now the grain truck was filled to the limit with corn. Most of all, John's mother was alive and well after her heart operation. She was out in her garden again, with a heart valve from a pig, nurturing the last of the bell peppers and greens. John, relaxed, laughed at the jokes and banter as he mixes a batch of hushpuppies.

John had just finished cooking the first batch of spots. He drained and dumped them on a paper plate. He turns down the heat on the burner and then drops in a spoonful of hushpuppy mix. The first batch is always for the dog, whether it turns out well or not. With the spots ready, nobody wanted to wait. Nobody wanted to look into a longing dog's eyes while they are eating, either. Hushpuppies are served with the fish with the understanding that when Katie comes begging she will receive a hushpuppy for her efforts. This is easy enough as the first batch is hard on the outside and uncooked on the inside. The oil must be a lower temperature to cook them more slowly and thus more thoroughly.

By the time the men consumed fifteen spots, and all the hushpuppies and slaw, it was getting dark and there was a chill in the air. Mr. Johnson closed the large barn door and turned on the heater. The men sat down on the stools at the workbench, talked about how full they were, how it was the best meal they have had in a long time, and how they should do it again soon. John took out his guitar and started to play the instrumental while talking about overhauling the tractor before Christmas. His playing seemed automatic, and had absolutely no connection to what he was talking about. In his twenties, John had played in a number of country music bands that had toured the southeast. He even played in Nashville at one time. In his thirties, he had his own band, "Carolina Spotlight," that played a mixture of country and beach music. He made the choice sometime in his mid-thirties to get a Masters of Arts in Education and farm; being on the road had lost its appeal. One of the men piped up, "Well, are you going talk or are you going to sing?" He started singing an old song about autumn and a girl with blue eyes. After he finished, the fellows ask him to play another, and another. About nine o'clock the little celebration came to an end, and John saw each his guests out to their trucks. These gentlemen enjoyed their food, enjoyed each other's company, and were happy with the year's accomplishments.

Food and music go together in the Bladen County, North Carolina. It is true of the whole community. In spite of all the modern conveniences of communication, visiting one's neighbors remains one of the chief forms of social interaction in farming communities. At one time in the not so distant past there was little to do in Elizabethtown, the county seat. It had Melvin's Poolroom, a place known for its great hamburgers. And there was Woody's Grill, and Melton's Restaurant, and a short-order chicken place called Masterfried. There was one movie theatre. That was it. If youngsters were looking to entertain themselves they had to be creative. There was a whole county to explore. Fishing, hunting, camping, boating, and playing ball had always been available options. There was also music. Music at the school dances, music at church, and music when a few met in somebody's barn to play

their guitars and fiddles. There was music around campfires out in the woods. At all of these places where music could be heard there most certainly was somebody cooking. A great one pot meal that can be cooked anywhere is called "Chicken Bog." It consists of a whole chicken, smoked sausage, and rice. It can be cooked over a fire in a kettle, on the stove, or in a crock-pot. Likewise, "Ham-bean Stew" is just as easy. Pieces of ham are put in a pot with any combination of beans, an onion, and a shredded carrot. Barbeque is slow roasted pork shoulder meat cooked over the embers from hardwood. It is basted with a mixture of cider vinegar, melted butter, black pepper, and red pepper. This is generally a basic Coastal North Carolina recipe for barbeque sauce. There are many variations to this mixture, none of which contains tomato sauce. All of these meals are made from simple ingredients. All must be cooked slowly. Often they are served from transported to the site of the feast and served from a pickup truck. The pickup's tailgate serves as a buffet. This is the kind of food typical of all types of outdoor get-togethers. "Sit-down meals" are another thing altogether.

John's mother, Almira, prepares meals that are simply beyond belief both in flavor and size. She states her meals are typical for the Wesley's Chapel area. Breakfast is country ham or sausage, eggs, biscuits, grits, fresh fruit, juice, and coffee. Lunch might be fried chicken, rolls, snap beans and dumplings, potatoes, cucumber salad with vinegar and pepper, sweet potato pie, and iced tea. The meat for dinner is often pork roast, roast beef, country fried steak, meal loaf, or ham. There is often rice and gravy, or mashed potatoes and gravy. When McAuly's sweet corn is in season there is corn on the cob. Snap beans, lima beans, field peas, and navy beans flavored with ham accompany any of the above. Spoon bread, corn fritters, or cornbread sticks are served hot from the oven. Desserts of all kinds are constantly being prepared in the Johnson house. Often there is a choice of two different desserts (see Figure 21 and Figure 22). The reason for all this food is that people often drop by to visit. It is only right to offer them a meal when they do. There must be enough for the family, the men helping with the farm, relatives and friends who stop by, and the frequent functions at church. Mrs. Johnson prepares preserves from pears and grapes grown on her land. There is an abundance of pecans and walnuts from each year from the trees growing down by the branch. Nothing goes to waste.

Almira Johnson has passed on to her children a sense of independence and the drive to become the best they can be. All her children have Masters Degrees (a standard that she herself set when as a young widow she entered college to become a teacher so that she could support her family). She when on to graduate school and earned her Masters in Education. Now, John and his sisters are accomplished professionals. In addition, his sisters have great singing voices and can play several instruments. All are great cooks, each having their favorites. John's sister Debbie makes wonderful desserts. His sister, Cynthia, loves to cook beef and pork over hardwood fire. After rendering the wood to embers, she slowly roasts the meat. Back in the 1980's, Cynthia built her own home after her own design. The house is a massive post and beam structure with high ceilings. This she did by herself almost entirely with the exception of the plumbing, electrical wiring, and heating system. Alton Johnson, a cousin, wired both Cynthia's house and the new barn. Mr. Johnson points out that while building your own house and barn is unusual in the city, people in rural communities have been doing their own work from the beginning.

Figure 21. Mrs. Almira Johnson removes a sweet potato casserole from the oven.

Figure 22. Sweet potatoes are grown locally, and often available from roadside stands.

Woodworking, repairing machines, and growing your own food is part of the life. Everybody offers to help his or her neighbor, but everyone is independent. The Johnson children learned from a very early age an incredible range of skills. Building seems to be a common activity for the Johnsons. John's father, Wilton Johnson, built the first family barn in the 1950's. Mrs. Johnson chose to have the original house built in a very modern style. A number of utility structures have been built over the years before Cynthia, John's sister, built her house. In 1996, John built the new barn, and in 2002-2002, expanded it after some of the land above the branch was cleared (see Figure 23 and Figure 24).

After a fine Sunday dinner prepared by Almira Johnson, John responded to the author's request to see the family cemetery. John was more than willing to honor the request. As he drove to the site he recounted some of the family history. John Johnson's father, Wilton John and his grandfather, James Douglas Johnson are buried in Wesley's Chapel Church Cemetery at its present location. The search for the grave of his great-grandfather, Nathan Henry Johnson, led to the Old Johnson Graveyard off Peanut Plant Road. The cemetery is in a clearing, situated on a bluff overlooking a branch, at the end of a dirt road. Across the branch, and below the bluff, is the modern community of Happy Valley. The branch at one time fed into Brown's Creek. Now, a pond has formed where Lakewood Drive separates the branch from Brown's Creek at Peanut Plant Road. During Hurricane Floyd, the pond overran its banks and the branch reunited with Brown's Creek. The name "Happy Valley" has been around longer than the modern development. It should be noted that there is a discrepancy between the name "Lakewood Drive," which appears on road maps, and the actual road sign. The road is named "Happy Valley Road." Perhaps by coincidence, or not, some of the tombstones in the Johnson Graveyard refer to "crossing over into the Happy Valley."

The grave of Nathan Henry Johnson (1864-1937) is marked with a stone that is crowned with a crossed olive branches relief above his name (see Figure 25). Below his name and the dates for his birth and death, that is an inscription, "An honest man is the noblest work of God." Beside Nathan's grave is his wife's grave. "Susie G." (Susan Gillespie Johnson) lived from 1866 to 1940. Nathan's father, Jacob Johnson, is marked with the tombstone of a Confederate Veteran. He was born in 1824 and died in 1899. His first wife, Martha Cain Johnson, who died in 1861 at the age of 35, is buried to his left. His second wife, Lucy Dowless Johnson, who lived from 1837 to 1917, is buried to the right. John Johnson remarks, after a close examination of Martha Cain Johnson's grave, that he had married a member of the Cain family. She, like Martha Cain, had also died young. The Gooden family is very well represented in the Johnson Cemetery. Mr. Johnson points out the grave of Steenie Gooden, wife of Charles P. Butler, who lived from 1889 to 1971. Mr. Johnson states that through Steenie Gooden the Johnson family is linked to the Gooden family. The Johnson family is also linked to the Daniel family. The relationship is not as apparent here as in the Wesley's Chapel Cemetery.

Thus far, we have seen how the farming families of the Wesley's Chapel area, not far from Elizabethtown, share both a bond of kinship through intermarriage and the common religious bond of the Methodist faith. The area is a good example of how a church can become the nexus of social development in a rural community.

Figure 23. During the summer of 2001, John Johnson commenced construction of an addition to his barn.

Figure 24. Like the 1996 barn, the addition started with a simple framing.

Figure 25. The grave of Nathan Henry Johnson in the Johnson Cemetery

Bladen County has many examples, some of which have been mentioned in this work, where a church is the only public building on the landscape for miles around. Finding John Johnson's ancestor, Jacob Johnson, was facilitated by Jacob's involvement in the founding of Wesley's Chapel Church. The Old Wesley Chapel Road is visible across the field as you enter the Johnson Cemetery. The question in John Johnson's mind was where to beginning looking for Jacob Johnson's parents. The only clue that Mr. Johnson had about the father of Jacob Johnson is that a planter named Joel Johnson was said to be Jacob's father. The source of this information is uncertain. There are three possible cemeteries that might be the site of Joel Johnson's grave. The closest to the Old Johnson Cemetery is the Old Hendon Cemetery off Highway 242. The next, and perhaps most accessible, is the Trinity Methodist Church Cemetery in Elizabethtown. The last cemetery is the Old Johnson Cemetery at Abbottsburg.

Old Hendon Cemetery is located off of NC 242 near its intersection with Old Wesley Chapel Road. Beside a garage on highway is a hand-painted sign that marks the road that leads off into a field and into dense woods. As a teenager John had come upon this cemetery by accident while hunting. This cemetery differs vastly from the well-tended Old Johnson Cemetery. The graves rest under a thick blanket of leaves. Some stones are worn so smooth by the elements that the inscriptions are not discernible. Some graves have wooden markers where no inscription remains. In some plots the ground was at least six inches lower in the length and width required to receive a coffin. The names on the tombstones that could be read in 2000 are Gillespie, White, Singletary, and Hester. There were no Johnson tombstones. Soon, it was starting to get dark, so Mr. Johnson decided it was time to return home (See Figure 26).

Postscript (October 27, 2012)

From 2002 to the present, the author continued to document in photographs, videos, audio recordings, and notes Mr. Johnson's farming activities. This material is included in other volumes, video and slide presentation, and collections of field photographs.

Figure 50. Mr. Johnson searches for his ancestors in Old Hendon Cemetery.